GRC Planning Scheme Code Assessment

Miriam Vale Solar Farm

Prepared for: Private Energy Partners Pty Ltd

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1. Gladstone Regional Council Planning Scheme 2017 – Code Assessment Tables

1.1 Rural Zone Code

An assessment of the proposed solar farm against the relevant assessment benchmarks of the Rural Zone Code is provided in **Table 1**.

Table 1: Rural Zone Code Assessment Benchmark

Performance Outcomes	Acceptable Outcomes	Response
Caretaker's Accommodation Not Applicable – The proposed development does not involve the provision of caretaker's accommodation		
Roadside Stall Not Applicable - The proposed development does not involve the provision of roadside stall		
Built Form (if involving building work)		
PO3 Buildings are designed and located so as not to adversely impact on the rural character and amenity of the locality.	AO3.1 Building height for a dwelling house does not exceed 8.5m. Building height for Rural activities does not exceed 20m.	**Complies with AO3.1** The Project does not involve a dwelling house, or buildings associated with Rural activities. The control building (site office, operation and maintenance facility and staff amenities) and the workshop shed will not exceed 20 m in height. The LVIA in **Appendix F** demonstrates that the Project will not adversely impact on the rural character and amenity of the locality.
	AO3.2 Buildings, other than a roadside stall, are setback a minimum of: 1. 10m from the front and side boundaries for allotments greater than 2ha, or	**Complies with AO3.2** The proposed development involves a Renewable Energy Facility (Solar PV Farm) and a Substation. All allotments designated for buildings are greater than 2 ha in size. Therefore, ancillary uses/buildings such as the control building (site office, operation and

Performance Outcomes	Acceptable Outcomes	Response
	2. 5m from the front and side boundaries for allotments less than 2ha.	maintenance facility and staff amenities) have adopted a 10 m setback in compliance with A03.2(1).
Residential Density Not Applicable - The proposed development does not involve the provision of residential dwellings.		
Amenity		
PO5 Accommodation and community activities do not encroach on existing or approved rural and extractive industry operations or uses that may result in an adverse impact on amenity, health or safety.	AO5 Sensitive land uses are separated from: **1.** intensive animal industry uses by a minimum of 2km **2.** animal keeping (if only catteries and kennels) by a minimum of 1km **3.** waste disposal areas connected to an animal husbandry operation by a minimum of 500m **4.** cropping on areas of agricultural land by a minimum of 300m **5.** other agricultural activities (excluding cropping activities) by a minimum of 50m **6.** other rural activities, not elsewhere mentioned, by a minimum of 100m **7.** railway activities by a minimum of 100m **8.** the Benaraby Motorsport Facility by a minimum of 1,000m **9.** extractive industry operations as follows:	**Not applicable** The Proposed development does not involve the provision for accommodation or community activities, nor does it introduce new sensitive land uses.

<table>
<tr><th>Performance Outcomes</th><th>Acceptable Outcomes</th><th>Response</th></tr>
<tr><td></td><td>Sensitive land uses are separated from:
<table><tr><th>Operation</th><th>Separation distance</th></tr><tr><td>Extraction or processing involving blasting or crushing</td><td>1000m</td></tr><tr><td>Extraction or processing not involving blasting or crushing.</td><td>200m</td></tr><tr><td>Transport route</td><td>100m</td></tr></table></td><td></td></tr>
<tr><td>PO6
Outdoor lighting does not adversely affect the amenity of adjoining properties or create a traffic hazard on adjacent roads.</td><td>AO6.1
Light emanating from any source complies with Australian Standard AS4282 Control of the Obtrusive Effects of Outdoor Lighting or current version.

AO6.2
Outdoor lighting is provided in accordance with Australian Standard AS 1158.1.1 – Road Lighting – Vehicular Traffic Category V) Lighting – Performance and Installation Design Requirements or current version.</td><td>Complies with AO6.1 and AO6.2
All outdoor lighting will comply with AS4282 and AS 1158.1.1.
Any outdoor lighting will be installed so as to provide appropriate visual conditions which are conducive to the safe and comfortable movement of vehicle traffic at night and contribute to the discouragement of illegal acts. The site and all surrounding land is zoned rural; as such there is limited urban development in proximity to the site. Development lighting will not adversely impact the amenity of surrounding land uses.</td></tr>
<tr><td>PO7
Development does not adversely impact on the amenity of the surrounding rural or residential land uses or rural landscape character.</td><td>AO7
Plant and air–conditioning equipment, storage areas and processing activities are screened from view of the road or adjoining residential uses.</td><td>Complies with AO7
The Project area is surrounded by existing natural vegetation screening on the boundaries adjoining residential uses and public viewpoints (i.e. public roads, Bulburin National Park).
The LVIA in Appendix F demonstrates that the Project will not adversely impact on the rural character and amenity of the locality.</td></tr>
<tr><td colspan="3">Stock Routes</td></tr>
</table>

Performance Outcomes	Acceptable Outcomes	Response
PO8 Development on or adjoining a stock route shown on overlay map Agricultural Land Classification Overlay does not compromise the use of the stock route by travelling stock.	AO8 Accommodation activities (excluding dwelling house on an existing allotment, Caretaker's accommodation and Rural workers' accommodation) and community activities are separated from a stock route by a minimum of 200m.	**Not applicable** The closest stock route to the Project area is 13 km to the west.
PO9 Development on or crossing a stock route does not impede the free movement of stock.	AO9 Development provides: 1. for grade separation of transport infrastructure and stock, or 2. alternate unimpeded and watered stock route access.	**Not applicable** The closest stock route to the Project area is 13 km to the west.
For Assessable Development		
Land Use		
PO10 Development: 1. is consistent with the rural character of the locality 2. supports the primary rural function of the zone; and 3. protects rural, natural and scenic values of the locality.	No acceptable outcome is nominated.	**Complies with PO10** The Project is compatible with the surrounding agricultural land uses. Class B Agricultural Land Classification is present within the Project site. The development footprint includes 603.77 ha of Class B agricultural land. The Project will allow for the recommencement of agricultural land uses (subject to inherent land capability constraints) at the end of the Project life following decommissioning and rehabilitation works. The design of the solar farm, with panel structures suspended above the ground and attached to piles driven into the ground, ensures minimum disruption to the landform and protects and rural values of the locality. The LVIA in **Appendix F** demonstrates that

Performance Outcomes	Acceptable Outcomes	Response
		the Project will not adversely impact on the rural character and amenity of the locality.
PO11 Tourism (including associated accommodation) and recreation–related uses are: 1. small scale, and 2. compatible with rural production, natural resources and landscape amenity.	No acceptable outcome is nominated.	**Not Applicable** The proposed development does not involve the provision of a tourist activity.
Design and Amenity		
PO12 Development minimises potential conflicts with, or impacts on, other uses having regard to vibration, odour, dust or other emissions.	AO12.1 Development achieves the air quality design objectives set out in the *Environmental Protection (Air) Policy 2008*, as amended.	**Complies with AO12.1** No indicators as provided in Schedule 1 – Air Quality Objectives of the *Environmental Protection (Air) Policy 2019* (EPP (Air)), will be generated during the construction, operation or decommissioning stages of the Project. Dust generated during construction will be managed in accordance with the measures outlined in the Preliminary Erosion and Sediment Control Plan (P-ESCP) provided at **Appendix I** of the Planning Report. Site-specific measures will be determined by ESCPs and / or CEMPs to be developed prior to the commencement of construction.
	AO12.2 Development that involves the storage of materials on site that are capable of generating air contaminants either by wind or when disturbed are managed by: 1. being wholly enclosed in storage bins, or 2. a watering program so material cannot become airborne.	**Complies with AO12.2** The proposed development will involve the storage of materials on site during construction works. Whilst no contaminants as defined in the EPP (Air) will be present, dust management measures will form part of ESCPs and / or CEMPs to manage any potential dust generation during the construction of the Project. No

Performance Outcomes	Acceptable Outcomes	Response
		Project activities during the operational phase are anticipated to generate air contaminants.
PO13 Development prevents or minimises the generation of noise so that: 1. nuisance is not caused to adjoining premises or other nearby sensitive land uses, and 2. desired ambient noise levels in residential areas are not exceeded.	AO13 Development achieves the noise generation levels set out in the *Environmental Protection (Noise) Policy 2008*, as amended.	**Complies with AO13** Most construction work, including piling, trenching and deliveries, will be undertaken during standard construction hours: Monday to Saturday 6:30am to 6:30pm. Where necessary, low noise generating construction activities may be undertaken outside of standard construction hours. The operation of the substation (transformers) is the highest noise generating activity for the Project which will occur mostly during daytime hours (7:00am to 6:00pm). The Noise Assessment (**Appendix M** of the Planning Report) prepared for the Project concludes that no exceedances of daytime, evening or nighttime noise criteria as set out by the *Environmental Protection (Noise) Policy 2019* (EPP (Noise)) are expected. No other operational activities are anticipated to generate noise levels that would be audible or exceed the noise limits set out in EPP (Noise).
PO14 Development does not unduly impact on the existing amenity and character of the locality having regard to: 1. the scale, siting and design of buildings and structures 2. visibility from roads and other public view points, screening vegetation and landscaping 3. the natural landform and avoidance of visual scarring, and	No acceptable outcome is nominated.	**Complies with PO14** The location of the proposed solar farm and substation are in an area well-removed from the public view and screened by existing natural screening vegetation. The LVIA in **Appendix F** demonstrates that the Project will not adversely impact on the rural character and amenity of the locality. At the end of the Project life following decommissioning and rehabilitation works, the final

Performance Outcomes	Acceptable Outcomes	Response
4. vibration, odour, dust, spray drift and other emissions.		landform will not be inconsistent with the broader locality and will also allow for the recommencement of agricultural land uses.
PO15 All uses: 1. minimise noise, dust, odour or other nuisance from existing lawful uses including rural and industrial uses 2. minimise nuisance caused by noise, vibration and dust emissions generated by the state–controlled road and rail network in the vicinity of the land.	No acceptable outcome is nominated.	**Complies with PO15** The proposed development is not sensitive to noise, dust, odour or other nuisance from existing lawful uses. The closest state-controlled road is Bruce Highway which is approximately 3 km east of the Project site, and closest rail network further east of the state-controlled road. As such, no nuisance generated by either of these major transport networks are expected to the proposed development.
PO16 Development ensures ecological values, habitat corridors and soil and water quality are protected, having regard to: 1. maximising the retention of vegetation and the protection of vegetation from the impacts of development 2. minimising the potential for erosion and minimisation of earthworks 3. maximising the retention and protection of natural drainage lines and hydrological regimes, and 4. avoidance of leeching by nutrients, pesticides or other contaminants, or potential for salinity.	No acceptable outcome is nominated.	**Complies with PO16** An Ecological Assessment Report (EAR) (**Appendix G** of the Planning Report) has been prepared and the recommendations have been incorporated into the Project design and construction methodology to avoid/reduce impacts to ecological values. The proposed development avoids the clearing of regulated vegetation and further commits to the enhancement of riparian vegetation through the application of buffers and management plans including a biosecurity management plan, fauna management plan and a broader environmental management plan. Site-specific ESCP(s) will be developed for the Project and will ensure leaching by nutrients, pesticides, or other contaminants to waterways within and surrounding the Project site are avoided.
PO17 to PO21		

Performance Outcomes	Acceptable Outcomes	Response
Not Applicable to the works being undertaken		

1.2 Biodiversity Overlay Code

An assessment of the proposed solar farm against the relevant assessment benchmarks of the Biodiversity Overlay Code is provided in Table 2.

Table 2: Relevant Assessment Benchmarks for the Biodiversity Overlay Code

Performance Outcomes	Acceptable Outcomes	Response
Environmental Protecting and Buffering		
PO1 Development maintains and protects MNES (Matters of National Environmental Significance) and MSES (Matters of State Environmental Significance) by: 1. locating in areas that avoid adverse impacts on MNES and MSES, or 2. where adverse environmental impacts cannot be avoided, impacts are minimised and an environmental offset is provided for any residual adverse impacts, and 3. the underlying ecological processes and biodiversity values of MNES and MSES are maintained or enhanced. *Note—For MNES, consideration must be given to the requirements of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).* *Note—To assist in demonstrating achievement of this performance outcome, a detailed environmental and*	AO1 Development locates outside of an area supporting MSES (Matters of State Environmental Significance).	**Complies with PO1** The Project has been considered under the EPBC Act for potential impacts on MNES. The Project has been referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW). The referral and supporting MNES Report detail the site selection and Project design process undertaken to avoid and minimise impacts of the Project on MNES. As a result of this process, remnant vegetation, including high-value riparian vegetation has been avoided and does not form part of the development footprint. The EPBC Act referral concludes that the Project is unlikely to have a significant impact on MNES. **Complies with AO1** The EAR (**Appendix G** to the Planning Report) for the Project includes consideration of MNES and MSES. The EAR identifies that the Project's development footprint avoids impacts to MSES as mapped by the State. The broader Project area contains regulated vegetation (several patches Category B, C and R vegetation associated with riparian

Performance Outcomes	Acceptable Outcomes	Response
ecological assessment to confirm the extent and nature of values is required to be undertaken by applicants.		habitat and mapped essential habitat); however, these areas are outside of the development footprint. Therefore, the development footprint will not impact on areas of MSES. Vegetation associated with field-verified waterways with a Stream Order of 2 (Amber – Moderate Risk) and 3 (Red – High Risk) has been avoided and appropriate buffers applied to maintain and enhance ecological connectivity within the Project area.
PO2 Development is setback from and provides an adequate vegetated buffer to significant vegetation, habitats and areas containing MSES in order to: 1. protect these areas and their values from threatening processes 2. avoid edge effects such as undesirable microclimate effects and threats from non–native or pest fauna or flora, and 3. maintain and enhance ecological connectivity. *Note—Any setbacks or other areas required for bushfire management, safety, recreation, maintenance or any other purpose are provided in addition to a vegetated buffer provided for ecological and environmental protection purposes.* *Note—An alternative buffer width may be proposed where buffers for significant species and ecological communities, including areas of habitat for listed threatened and migratory species, are based on best practice and current scientific knowledge of individual*	AO2 A buffer extending from the outside edge of an area of MSES is provided and has a minimum width of: 1. 200m where located outside an urban area, or 2. 50m where located within an urban area.	**Complies with PO2** The ecological values within the broader Project area have been avoided through the site selection process. The development footprint has considered the following: • Avoidance of State mapped MSES including regulated vegetation. • Avoidance of Stream order 2-3. There are no Stream orders 4 or 5 within the Project area. • Avoidance of high-quality species habitat. The areas of higher ecological value within the Project area are not within the disturbance footprint. The development footprint is mainly cleared, non-derived grassland with low utilisation of flora and fauna species as the land is previously disturbed and cleared from previous intense grazing use and private timber plantation (Tasmanian Blue Gum). Several patches of historical timber plantation remain spread across the Project area; however, are isolated from other large tracts of remnant vegetation and are infested with weed species (e.g., Lantana and Prickly Pear). A significant portion of MSES vegetation and habitat within the Project area overlaps with *Subtropical eucalypt floodplain forest and woodland of the New South Wales*

Performance Outcomes	Acceptable Outcomes	Response
species requirements and supported by an ecological assessment. Other legislation, including the Nature Conservation Act and EPBC Act may establish other requirements with which applicants must comply.		*North Coast and South East Queensland bioregions threatened ecological community* (Subtropical Eucalypt Floodplain TEC). In accordance with recent DCCEEW advice, a 50 m wide buffer surrounding the Subtropical Eucalypt Floodplain TEC is considered sufficient to avoid direct and indirect impacts to the TEC. A significant portion of the MSES within the Project area overlap with Stream Order 2 and 3 watercourses which also represents areas of the Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions TEC. The development footprint has considered a 50 m wide buffer either side of the TEC patches and an additional minimum 10 m Stream order 2 and 3 buffer (minimum 120 m total buffer of the MSES centreline). The TEC buffer has been nominated based on advice received by the DCCEEW and is considered sufficient to minimise impacts to the TEC and therefore is also considered sufficient for minimising impacts to MSES. In those areas where MSES overlap with Stream Order 2 and 3 watercourses but are not within TEC patches, a minimum buffer of 50 m (25 m either side of the MSES centreline) has been applied. It is considered that a minimum buffer of 50 m is sufficient to maintain and enhance connectivity between large tracts of riparian vegetation, and in between areas of TEC patches. The riparian corridors within the Project area are substantially degraded through weed infestations at present. Furthermore, the corridors are presently suffering from edge effects associated with the historical agricultural pursuits within the broader Project area.

Performance Outcomes	Acceptable Outcomes	Response
		In addition to buffers, to further protect areas of MSES and areas of high ecological value from threatening processes, a biosecurity management plan, fauna management plan and a broader Environmental Management Framework will be developed and implemented prior to construction works. These management plans will require actions such as weed and pest eradication and fencing. The implementation of these plans will ensure the maintenance and enhancement of ecological connectivity. Through the avoidance of higher order watercourses with presented evidence of suitable habitat for aquatic flora and fauna species and TEC areas, ecological connectivity will be maintained and enhanced. The watercourses and riparian areas which traverse the Project area will be retained as functional connectivity corridors for flora and fauna for the life of the Project. The EAR for the Project is included as **Appendix G**.
PO3 Development within 500m of turtle nesting beaches is located, designed and operated to: 1. protect the habitat values of the rookery for turtle breeding 2. maintain a vegetated buffer adjacent to the beach 3. ensure access to the beach nesting area is managed in a way that protects a turtle nesting area, and 4. ensure lighting does not impact on the ecological and habitat values of turtle nesting areas and rookery.	AO3.1 Development within 500m of a turtle nesting beach ensures any lighting: 1. does not spill onto beach areas 2. is on a structure no higher than 8.5m 3. is directed away from the beach, and 4. includes characteristic wavelengths that will not affect turtles.	**Not applicable** The proposed development will not occur within identified turtle nesting habitat.
	AO3.2 Development is setback from and maintains at least a 200m wide vegetated buffer to turtle nesting beaches. The buffer is maintained in a natural state and is kept free from development.	

Performance Outcomes	Acceptable Outcomes	Response
Wetland and waterway buffers		
PO4 An adequate buffer to a wetland in a wetland protection area is provided and maintained to: 1. protect and enhance habitat values, connectivity and other ecological processes and values 2. protect water quality and aquatic conditions 3. maintain natural micro–climatic conditions 4. maintain natural hydrological processes 5. prevent mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding, and 6. prevent loss or modification of chemical, physical or biological properties or functions of soil. *Note—Any setbacks or areas required for bushfire management, safety, recreation, maintenance or any other purpose, are provided in addition to a vegetated buffer provided for ecological purposes*	AO4 A development free buffer surrounding a wetland in a wetland protection area is provided and has a minimum width of: 200m where the wetland is located outside an urban area, or 50m where the wetland is located within an urban area. *Note—To avoid conflict, where a development requires multiple buffers to be established by this code to protect waterways, ecological corridors, wetlands or MSES, the greatest distances required by this code will prevail to the extent of any inconsistency.*	**Not applicable** The proposed development is not located within a wetland in a wetland protection area.
For all assessable development		
PO5 Alterations to natural landforms, hydrology and drainage patterns do not adversely impact on areas containing MSES.	AO5 No acceptable outcome is nominated.	**Complies with PO5** The Project will not adversely impact natural landforms, hydrology and drainage patterns. The Flood Impact Assessment and Stormwater Management Plan in **Appendix D** demonstrate how potential impacts will be appropriately managed.
PO6	AO6	**Complies with PO6, PO7 and PO8**

Performance Outcomes	Acceptable Outcomes	Response
Development retains and enhances riparian vegetation along watercourses and drainage corridors, and vegetation along timbered ridgelines.	No acceptable outcome is nominated.	The riparian corridors within the Project area are substantially degraded through weed infestations at present. Furthermore, the corridors are presently suffering from edge effects associated with the historical agricultural pursuits within the broader Project area. In addition to buffers, to further protect areas of MSES and areas of high ecological value from threatening processes, a biosecurity management plan, fauna management plan and a broader Environmental Management Framework will be developed and implemented prior to construction works. These management plans will require actions such as weed and pest eradication and fencing. The implementation of these plans will ensure the maintenance and enhancement of ecological connectivity. Through the avoidance of higher order watercourses with presented evidence of suitable habitat for aquatic flora and fauna species and TEC areas, ecological connectivity will be maintained and enhanced. The watercourses and riparian areas which traverse the Project area will be retained as functional connectivity corridors for flora and fauna for the life of the Project. The EAR for the Project is included as **Appendix G**.
PO7 Buffering, rehabilitation or restoration, protects and enhances MSES and their underlying ecological processes, habitat and biodiversity values by: 1. using site appropriate and locally occurring native species 2. replicating as far as practicable, the species composition and structural components of healthy remnant vegetation and associated habitats, including understorey vegetation, and 3. excluding environmental weeds, declared plants and other non–native plants likely to displace native flora or fauna species or degrade habitat. *Note—To assist in demonstrating achievement of this performance outcome, an ecological assessment and rehabilitation plan is undertaken by the applicant.*	AO7 No acceptable outcome is nominated.	
PO8 Degraded areas supporting MSES or other environmental values important to the maintenance of underlying ecological processes required to maintain biodiversity, are rehabilitated as near as is practical to the naturally occurring state of native plant species and ecological communities.	AO8 No acceptable outcome is nominated.	
PO9	AO9	**Complies with PO9**

Performance Outcomes	Acceptable Outcomes	Response
Development: 1. avoids the introduction of pest species (plant or animal) that pose a risk to the ecological integrity and biodiversity values of MSES, and 2. includes appropriate pest management practices to control any existing threat of pest species in a way that provides for the long term ecological integrity of MSES.	No acceptable outcome is nominated.	An Environmental Management Framework will be implemented during the construction and operation of the Project. A key aspect of the framework is pest and weed management which will be managed through a biosecurity management plan. The biosecurity management plan will be site-specific based on the values present within the Project development footprint and broader Project area (where MSES is mapped). The biosecurity management plan will aim to avoid the introduction of weed and pest species that pose risk to the ecological processes of the environmental values and MSES (within the broader Project area). As well as measures to avoid the introduction of non-native species, the biosecurity management plan will also aim to eradicate weeds and pest currently within the site. The strategies proposed to enhance biodiversity within areas not impacted by the Project will also ensure the management of weeds and pests, particularly within the biodiversity corridors through the broader Project area.
Significant species, wildlife nesting and breeding areas		
PO10 Development avoids direct and indirect impacts on significant ecological communities and significant species and their habitats, including disturbance from the presence of vehicles, pedestrian use, increased exposure to domestic animals and noise and lighting impacts. *Note—To assist in demonstrating achievement of this performance outcome, a detailed environmental and ecological assessment to identify any significant species*	AO10 No acceptable outcome is nominated.	**Complies with PO10** The proposed solar farm has been designed to minimise impacts to ecological communities and significant species and their habitat. The development footprint proposes infrastructure in areas cleared of vegetation and avoids and minimises significant direct and indirect impact on conservation significant species and communities. The EAR (**Appendix G** of the Planning Report) assesses the potential ecological impacts of the Project. A field assessment was undertaken as part of the ecological assessment to identify the presence of conservation

Performance Outcomes	Acceptable Outcomes	Response
or communities that may be impacted by development, is undertaken by applicants.		significant species or features that may provide habitat for conservative significant species. Overall, significant species listed under both the NC Act and the EPBC Act were not identified within the Project area. Four distinct patches of the *Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions* Threatened Ecological Community (Subtropical Eucalypt Floodplain TEC) were identified within the Project area. Through Project design, these patches have been avoided and appropriate buffers applied between the disturbance footprint. No Koalas or evidence of Koalas was observed within the Project area, nor are there records of Koala from the Project area or wider locality within the past 20 years. However, a conservative assessment approach has been adopted and an assessment of significance has been prepared as part of the MNES for the EPBC Referral. This assessment determined that significant impacts are unlikely. Direct impact on habitat was avoided through site selection (avoidance of remnant and high-value regrowth). However, the Project was assessed in accordance with the EPBC Act and a referral submitted to DCCEEW to determine if the Project is a controlled action. During construction and operation of the Project, environmental impacts will be managed through an Environmental Management Framework with management plans to ensure disturbance to fauna and flora is minimised and mitigated (including disturbance from the presence of vehicles, pedestrian use, increased exposure to domestic animals and noise and lighting impacts).

Performance Outcomes	Acceptable Outcomes	Response
PO11 Areas of habitat that support a critical life cycle stage such as feeding, breeding or roosting or ecological function for threatened species, ecological communities or migratory species are protected and not impacted by development	AO11 No acceptable outcome in nominated.	**Complies with PO11** No conservation significant species are evident within the Project's development footprint and potential impacts to the Koala, marine bird species and Subtropical Eucalypt Floodplain TEC are considered in the EPBC Act referral. Through Project design, the patches of Subtropical Eucalypt Floodplain TEC have been avoided and appropriate buffers applied from the disturbance footprint. Field surveys across the Project area did not identify any areas of habitat that support a critical life cycle stage for threatened species, ecological communities or migratory species within the disturbance footprint. A Species Management Program under the NC Act will be prepared prior to the construction of the Project and will: • Assess the threats to native animal breeding places resulting from a planned activity. • Incorporate management actions that will avoid or minimise both the immediate and the long term impact of removing or altering an animal breeding place. • Set monitoring and reporting requirements that demonstrate the management actions in the SMP are effectively implemented and produce the intended results.
Ecological corridors		
PO12 Development protects ecological corridors, enhances ecological connectivity to habitats on and/or adjacent to the site. Ecological corridors and habitat linkages have dimensions and characteristics to support:	AO12.1 Development does not occur in an ecological corridor. AO12.2 No acceptable solution is nominated where in an urban residential zone or centre zone. In all other	**Complies with PO12** Within the Project area, ecological corridors have been identified along major watercourses (riparian) and vegetation, specifically woodland patches associated with the undeveloped Council road reserves that traverse between properties observed to contain numerous mature

Performance Outcomes	Acceptable Outcomes	Response
1. ecological processes and functions that enable the natural change in distributions of species and provide connectivity between populations of species over long periods of time 2. ecological responses to climate change 3. connectivity between large tracts and patches of remnant vegetation, habitat areas and areas supporting MNES and MSES, and 4. effective and unhindered day–to–day and seasonal movement of avian, terrestrial and aquatic fauna.	zones including the Rural Zone, Environmental Management Zone, Conservation Zone, all Industry Zones, Emerging Community Zone and Limited Development Zone: Where an ecological corridor is intended to facilitate fauna movement, access or use of an area supporting MNES or MSES, the ecological corridor is maintained and restored to achieve a minimum width of 350m consisting of: 1. a 250m wide core corridor to support avian species and most arboreal mammals, and 2. a 50m wide vegetated buffer extending from the outside edges on both sides of the core corridor.	tall trees. Through Project site selection and design processes, these vegetated areas have been avoided and do not form part of the Project's disturbance footprint. The remaining balance of the Project area is either non-derived grassland or hardwood timber plantation. As presented in the EAR (**Appendix G** of the Planning Report), the Project area has been historically grazed intensively and clearing has been maintained dating back to 1981 for agricultural purposes and private hardwood timber plantation of Tasmanian Blue Gum. Ecological surveys undertaken demonstrates no utilisation of the site by MNES and MSES conservation significant species; however, several patches of the Subtropical Eucalypt Floodplain TEC were identified. Connectivity between large tracts of riparian vegetation, and in between areas of the Subtropical Eucalypt Floodplain TEC will be maintained and enhanced through the application of appropriate buffers between these areas and the proposed development footprint. These ecological buffers for riparian vegetation and avoidance of vegetation across the site will allow for ecological processes and functions to improve. The proponent proposes to implement biodiversity management strategies to promote this improvement (e.g. weed and pest removal). The strategies will apply adaptive management to account for climate change. The mitigation and management measures in the EAR (**Appendix G** of the Planning Report) ensures that avian, terrestrial and aquatic fauna movement will be unhindered. Large areas of vegetation will remain intact for ongoing utilisation by fauna. The nature of the Project also allows for

Performance Outcomes	Acceptable Outcomes	Response
		continuous movement of terrestrial fauna (amongst the solar panels).
PO13 Isolated habitat areas are linked by a continuous corridor to provide effective ecological connectivity and to create additional linkages along waterways, wetlands, drainage lines, ridgelines, coastlines and other areas where possible.	AO13 Development provides a continuous corridor having a minimum width of 100m linking areas of protected vegetation to each other and other vegetation areas off–site.	**Complies with PO13** As described in response to PO12, ecological connectivity is maintained through biodiversity corridors, designed to retain and enhance existing riparian vegetation along watercourses within the Project area. The corridors will continue to provide effective ecological connectivity and enhance quality of vegetation through active management and maintenance. The landscape ecological function of the Project area is expected to be improved through the development of the Project by strengthening and enhancing the key riparian corridors within a historically degraded environment.
PO14 Development facilitates the unimpeded use and movement of terrestrial and aquatic fauna accessing the site or likely to use an ecological corridor as part of their normal life cycle by: 1. ensuring that development (e.g. roads, pedestrian access, in–stream structures) during both construction and operation does not create barriers to the movement of fauna along or within ecological corridors 2. providing wildlife movement infrastructure where necessary and directing fauna to locations where wildlife movement infrastructure has been provided to enable fauna to safely negotiate a development area, and	AO14 No acceptable outcome is nominated.	**Complies with PO14** The development will be designed to enable fauna movement to occur across the Project area. The ecological corridors maintained throughout the site may be utilised by flora and fauna species during construction and operation of the Project. Where works may be required in proximity or within these corridors, connectivity will be maintained (i.e. where watercourse crossings are required, temporary works will be undertaken in accordance with Accepted Development Requirements for waterway barrier works or approved operational works). Project infrastructure such as fencing will be designed to include appropriate fauna passage and crossing and not limit fauna movement and in accordance with a fauna management plan. Corridors will be maintained through the Environmental Management Framework and biodiversity management strategies. Design

Performance Outcomes	Acceptable Outcomes	Response
3. separating fauna from potential hazards through the use of appropriate barriers, fencing and buffers.		will accommodate for fauna movement and will be managed through construction and operation.
Monitoring		
PO15 During construction and operation of development, ongoing management, monitoring and maintenance is undertaken to ensure impacts on areas supporting MNES or MSES and their underlying ecological processes and biodiversity values are avoided or minimised. *Note—Compliance with this requirement can be achieved by preparing a Monitoring and Remediation Plan in accordance with best practice. Where necessary, remedial action is identified and carried out on land managed by the entity carrying out the development.*	AO15 No acceptable outcome is nominated.	**Complies with PO15** Vegetation and habitat features that may support MNES will be determined through the EPBC Act assessment process. If the Project is a controlled action and is approved by DCCEEW, the proponent may be conditioned to monitor MNES. MSES values have been avoided by the development footprint through Project site selection. Where potential impacts may occur to flora and fauna, a Flora and Fauna Management Plan will be implemented as part of the Environmental Management Framework for the Project. Ongoing management, monitoring and maintenance requirements will be incorporated into the Environmental Management Framework.
Environmental Offsets		
PO16 Where it is not possible to avoid adverse impacts on MSES and development has minimised adverse impacts to the greatest extent possible, development provides an offset for any significant residual impact in accordance with the *Queensland Environmental Offset Policy 2014*.	AO16 No acceptable outcome is nominated	**Complies with PO16** The proposed development has directly avoided MSES values mapped by the State therefore offsets as per the requirements of the *Queensland Environmental Offset Policy 2014* are not required.
Wetland protection area Not Applicable – The proposed development is not located within or near to a wetland protection area		
Wetland and waterway barriers		

Performance Outcomes	Acceptable Outcomes	Response
PO18 An adequate buffer to a waterway is provided and maintained to: 1. protect and enhance habitat values, connectivity and other ecological processes and values 2. protect water quality and aquatic conditions 3. maintain natural micro–climatic conditions 4. maintain natural hydrological processes 5. prevent mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion or scalding, and 6. prevent loss or modification of chemical, physical or biological properties or functions of soil. *Note—Any setbacks or areas required for bushfire management, safety, recreation, maintenance or any other purpose, are provided in addition to a vegetated buffer provided for ecological purposes.*	AO18 In all other zones including the Rural Zone, Environmental Management Zone, Conservation Zone, all Industry Zones, Industry Investigation Zone, Emerging Community Zone and Limited Development Zone: Other than where cropping for forestry for wood production, a vegetated and development free buffer is provided and maintained extending from the high bank of the waterway or plan position of a waterway (whichever is the greater) and with a minimum width of: 1. stream order 1 or 2: 25m, or 2. stream order 3 or 4: 50m, or 3. stream order 5 and above: 100m. *Note—Stream order is mapped on Fish habitat area mapping in OM.*	**Complies with PO18** An assessment of water features mapped under the *Queensland waterways for waterway barrier works* spatial data layer has been undertaken to verify conditions and subsequent mapping in order to inform design and to help determine the subsequent permit requirements for proposed waterway crossing locations. *Stream order 1* Three Stream order 1 mapped waterways (Green – Low Risk) were deemed to not possess the physical and hydrological attributes necessary for a waterway under the *Fisheries Act 1994* (Fisheries Act). As there was no observable difference between the surrounding pasture and the mapped water feature, it was considered to likely be a shallow drainage line that provides no aquatic habitat value under present conditions. As such, these waterways were included in the development footprint. The field-verified waterways within the Project area have been incorporated into the Project design as follows. *Stream order 2 and 3 (and partial Stream order 1)* All Stream order 2 and 3 watercourses and a partial section of a Stream order 1 watercourses considered present in the field assessment have been buffered by 20m (10m either side). *All stream orders* Limited works will occur within mapped waterways for the establishment of linear infrastructure (internal access tracks). Where works are required, they will be undertaken in accordance with the Accepted Development Requirements for waterway barrier works or an operational works approval. The Project Environmental Management

Performance Outcomes	Acceptable Outcomes	Response
		Framework including the Stormwater Management Plan and Erosion and Sediment Control Plan will be implemented to manage construction and operational works which may impact on water quality. As the current land use of the Project site is heavily disturbed grazing practices, it is anticipated that the new land use will reduce the intensification of ground disturbance and reduce sedimentation and run-off. *Unmapped water features* In addition to the mapped water features described above, three (3) additional features were identified within the Project area through field verification surveys in 2023. Although unmapped by the Department of Agriculture and Fisheries, these have been considered waterways under the Fisheries Act due to the presence of defining physical and hydrological waterway attributes. As such upgrading or developing new crossings must comply with the 'Accepted development requirements for operational work that is constructing or raising waterway barrier works'. The proposed development footprint has avoided these unmapped water features with appropriate buffers.
Wetland hydrology and stormwater management Not Applicable – The proposed development is not located within or near to a wetland area		
Wetland ecological values Not Applicable - The proposed development is not located within or near to a wetland area		
Environmental offsets		
PO27 For development, where it is not possible to enhance existing values or avoid adverse effects or alternatively minimise adverse effects any remaining environmental	AO27 Where environmental offsets are required in this code, they must be provided in accordance with the *Queensland Environmental Offset Policy 2014*.	**Complies with PO27** No offsets are required for the Project.

Performance Outcomes	Acceptable Outcomes	Response
impacts are offset in accordance with the *Queensland Environmental Offset Policy 2014*.		
Monitoring Not Applicable - The proposed development is not located within or near to a wetland in a wetland protection area		

1.3 Bushfire Hazard Overlay Code

An assessment of the proposed solar farm against the relevant assessment benchmarks of the Bushfire Hazard Overlay Code is provided in Table 3.

Table 3: Relevant Assessment Benchmarks for the Bushfire Hazard Overlay Code

Performance Outcomes	Acceptable Outcomes	Response
Site Suitability		
PO1 Development maintains the safety of people and property by not exposing them to an unacceptable risk from bushfire.	AO1 No acceptable outcome is nominated	**Complies with PO1** A Bushfire Management Plan (BMP) (**Appendix H** of the Planning Report) has been prepared for the Project and demonstrates how the Project complies with this bushfire hazard overlay code. The bushfire hazard assessment and radiant heat exposure assessment in the BMP has been undertaken in accordance with Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience – Bushfire' 2019 (Bushfire resilient communities), which was prepared by the Queensland Fire and Emergency Services to provide technical guidance for the implementation of Natural Hazards, Risk and Resilience – Bushfire, State Planning Policy State Interest guidance material 2019 (SPP guidance material – bushfire).

Performance Outcomes	Acceptable Outcomes	Response
PO2 Development does not result in a higher concentration of people living, working or congregating in a high or very high bushfire hazard area unless it can be demonstrated: 1. there is an overriding community need in the public interest, and 2. no other site is suitable and reasonably available. *Note—A 'medium, high or very high bushfire risk hazard area' means land mapped on the bushfire overlay map as having medium, high or very high potential bushfire risk.*	AO2 The following uses are not located on land within a confirmed medium, high or very high bushfire hazard area: 1. childcare facility 2. community care centre 3. educational establishment 4. hostel 5. hospital 6. multiple dwelling 7. non–resident workforce accommodation 8. residential care facility 9. retirement facility 10. shopping centre 11. short–term accommodation 12. tourist attraction 13. tourist park	**Complies with AO2** The Project does not involve the land uses identified in AO2.
Water Supply		
PO3 Development in areas with a reticulated water supply has adequate flow and pressure for fire–fighting purposes at all times.	AO3 The water supply network has a minimum sustained pressure and flow of at least 10L per second at 200kPa	**Not applicable** The Project is not in a reticulated water supply area.
PO4 Development in areas without a reticulated water supply has an appropriate dedicated water supply for fire–fighting purposes that are safely located and freely accessible for fire–fighting purposes at all times.	AO4.1 Development involving a gross floor area greater than 50m2 where a reticulated water supply is not available is: 1. provided with an easily accessible fire resistant on–site water storage of not less than 5,000L (e.g.	**Complies with PO4** The BMP (**Attachment H** of the Planning Report) identifies the Project will have three water storage tanks with a capacity of 40,000 litres (L) for the purpose of bushfire fighting. Section 6.7 of the BMP provides specifications for the water storage tanks

Performance Outcomes	Acceptable Outcomes	Response
	concrete tank with fire brigade fittings, in–ground swimming pool, dam fed by a permanent water source) that is within 100m of each class 1, 2, 3, or 4 building, and 2. has a hard standing area allowing a heavy rigid fire appliance safe access to within 6m of the storage facility. *Note—Plastic water tanks are not considered to be fire resistant unless they are submerged.*	(which are based on AO4.1) and their proposed locations are identified in Figure 6.1 of the BMP.
	AO4.2 The location of water supplies is readily identifiable from the street frontage with clear signage directing firefighters to its access point.	**Complies with AO4.2** Water storage tanks will be identified with reflective wayfinding signage as per Section 6.8 of the BMP (**Attachment H**).
Roads, fire access trails and firebreaks		
PO5 Roads and fire access trails are designed and constructed to: 1. enable efficient access to buildings and structures for fire–fighting purposes for emergency services, and 2. swift evacuation in emergency situations.	AO5.1 Roads and fire access trails are designed and constructed to: 1. separate the development from the hazardous vegetation 2. have a maximum gradient of 12.5% 3. a minimum cleared width of 6m and a minimum formed width of 4m 4. have adequate drainage and erosion control devices 5. provides passing and turning areas for fire–fighting appliances at intervals of not less than 200m 6. have a vehicular access at each end to roads or a bushfire trail	**Complies with PO5** Specifications for access roads are provided in Section 6.3 of the BMP (**Attachment H**). The specifications are based on compliance with the minimum requirements for a category 1 fire-fighter vehicle by the New South Wales (NSW) Rural Fire Service. This specification has been used in lieu of specifications in the various Queensland guidelines as the NSW guidelines are well defined and documented and feedback received from other projects is that they are more practical to implement.

Performance Outcomes	Acceptable Outcomes	Response
	7. not involve any cul–de–sac 8. have gates locked with a system authorised by QFES, and 9. have suitable arrangements in place to ensure maintenance in perpetuity.	
	AO5.2 Development has direct access to an evacuation route with a potential fire intensity exposure no greater than 2kw/m^2. *Note—The distance from hazardous vegetation to achieve 2kw/m^2 is generally:* • *58m in a very high bushfire hazard areas* • *52m in a high bushfire hazard area, and* • *44m in a medium bushfire hazard area*	**Complies with AO5.2** The access and egress for the Project is via existing public roads, being Burgess Road (main access location) and Cawthrays Road (alternative access) which both connect onto Blackman Gap Road and then to the Bruce Highway.
	AO5.3 Development incorporates an area of managed vegetation that separates lot boundaries from hazardous vegetation by a distance of: 1. 20m to a high or very high bushfire risk area, or 2. 10m to a medium risk bushfire area and includes a fire access trail.	**Alternative solution to AO5.3 proposed.** Radiant heat exposure modelling has been used to advise the width of the perimeter fire break (between 10m and 15m). The perimeter fire break has been designed to separate the solar development area from hazardous vegetation by a distance which achieves a radiant heat flux level ≤ 29 kilowatts/square metre. An access road will be located in the perimeter fire break for fire-fighting purposes. The alternative solution complies with the SPP guidance material – bushfire and Bushfire resilient communities.
PO6	AO6 No acceptable outcome is nominated	**Complies with PO6**

Performance Outcomes	Acceptable Outcomes	Response
Development provides for adequate fire breaks that minimise bushfire hazard by: 1. separating hazardous vegetation from development areas, and 2. facilitating access for firefighting and emergency vehicles.		A perimeter fire break will be established around the solar development area as per Section 6.1 of the BMP (**Attachment H**). An access road will be in the perimeter fire break for fire-fighting purposes.
Hazardous Materials		
PO7 The potential for the release of hazardous materials as a result of a bushfire event is avoided. *Note—The term 'hazardous material' is defined in the Glossary of the relevant State Planning Policy.*	AO7 The potential for the release of hazardous materials as a result of a bushfire event is avoided. *Note—The term 'hazardous material' is defined in the Glossary of the relevant State Planning Policy.*	**Complies with PO7** The Project does not involve hazardous chemicals that are present at the levels or in the quantities that would constitute the use being a hazardous chemical facility. The BMP (**Attachment H**) requires the storage or handling of hazardous materials to be in accordance with *Managing risks of hazardous chemicals in the workplace – Code of Practice 2023*, applicable safety data sheets, and otherwise in accordance with *Queensland Work Health and Safety Act 2011* and its regulations.
Reconfigure of a lot		
PO8 Additional lots avoid the risk of bushfire hazard to personal and property safety and increased risk of damage to assets. *Note—A site specific bushfire hazard assessment may demonstrate that the site is not within a bushfire hazard area or has a low degree of bushfire risk. Any*	AO8 New residential lots (including rear lots) do not occur in a bushfire hazard area.	**PO8 is not applicable.** The Project does not involve the reconfiguring of a lot.

Performance Outcomes	Acceptable Outcomes	Response
site specific bushfire assessment should be carried out in accordance with the method set out in Appendix 3 of State Planning Policy 1/03 Guideline Mitigating the adverse impacts of Flood, Bushfire and Landslide.		
Community Infrastructure		
PO9 Development for community infrastructure is located, designed and sited to: 1. protect the safety of people during a bushfire 2. not increase the exposure of people to the risk from a bushfire event, and 3. function effectively during and immediately after bushfire events.	AO9 No acceptable outcome is nominated.	**PO9 is not applicable.** The Project does not involve community infrastructure.

1.4 Scenic Amenities Overlay Code

An assessment of the proposed solar farm against the relevant assessment benchmarks of the Scenic Amenities Overlay Code is provided in Table 4.

Table 4: Relevant Assessment Benchmarks for the Scenic Amenities Overlay Code

Performance Outcomes	Acceptable Outcomes	Response
Siting of development		
PO1 Any buildings or structures are sited to minimise the impact on the natural landscape and topographical features.	AO1 Any buildings or structures are not located on ridgelines.	**Complies with AO1** The proposed development does not require the development of any buildings or structures on ridgelines. The LVIA in **Appendix F** demonstrates that the Project will not adversely impact on the rural character and amenity of the locality.

Performance Outcomes	Acceptable Outcomes	Response
		All Project infrastructure is proposed to be located away from areas of higher elevation and from areas of regional significance as mapped by the scenic amenities overlay.
For all assessable development		
Siting and design of development		
PO2 Development is visually integrated with the landscape elements to maintain or enhance the landscape and scenic amenities. *Note—The scenic amenity values of and visible from the land must be assessed and confirmed in a Scenic Amenity Assessment report prepared by a suitably qualified and experienced person. The report is to address strategies and design responses in order to demonstrate compliance with this performance criterion.* *The South East Queensland Regional Plan 2005–2026 Implementation Guideline No. 8: Identifying and Protecting Scenic Amenity Values provides a process for identifying areas with high scenic amenity as well as significant and popular viewpoints.*	AO2 No acceptable outcome is nominated	**Complies with PO2 and PO3** The Project area is located within areas identified as having regional significant scenic amenity 8. However, the development footprint has been designed to avoid these areas. The LVIA in **Appendix F** demonstrates that the Project is visually integrated with the landscape elements and will not adversely impact on the rural character and amenity of the locality.
PO3 The building design: 1. Minimises visual impact and prevents buildings from dominating the natural landscape 2. Is compatible with the natural characteristics of the area, and	AO3 No acceptable outcome is nominated	

Performance Outcomes	Acceptable Outcomes	Response
3. Avoids skyline intrusion.		
PO4 Building colours and materials blend in with the natural landscape to soften the visual impact of buildings.	AO4.1 Buildings utilize external finishes and colours that are a low to moderate Light Reflection Value (50% LRV or lower).	**Complies with AO4.1** The Project can be conditioned to comply with this AO.
	AO4.2 Development includes variations in wall and roof lines so as to minimise the appearance of building bulk. No external face of the building in a single continuous plane has a surface area of more than 100 square metres.	**Complies with PO4** The LVIA in **Appendix F** demonstrates that the Project will not adversely impact on the rural character and amenity of the locality. Due to the low visual prominence of the Project, it is suggested that the variations in wall and roof lines are not warranted for any buildings associated with the Project (e.g. O&M building).
Coastal development in rural areas Not Applicable - The proposed development is not of coastal development		
Visibility of development		
PO7 Development visible from identified significant viewer locations does not adversely impact upon significant views and landscape and scenic amenity values.	AO7 No acceptable outcome is nominated.	**Complies with PO7** The Project area is located within areas identified as having regional significant scenic amenity 8. However, the development footprint has been designed to avoid these areas. The LVIA in **Appendix F** demonstrates that the Project will not adversely impact on the rural character and amenity of the locality.
Reconfiguration of a lot		
PO8 The creation of new lots and roads are designed and oriented to minimise their visual impacts:	AO8 No acceptable outcome is nominated.	**Not applicable**

Performance Outcomes	Acceptable Outcomes	Response
1. preserve natural vegetation, particularly on ridgelines; 2. minimise the cutting and filling of the natural topography; and 3. minimise the impacts of new trunk infrastructure on existing vegetation.		The proposed development does not involve the creation of new lots or roads. Ingress and egress will be via the existing local road network.
Signage		
PO9 Signage does not detract from the natural landscape character of an area.	AO7 No acceptable outcome is nominated.	**Not applicable** No signage is proposed for the development.

1.5 Steep Land Overlay Code

An assessment of the proposed solar farm against the relevant assessment benchmarks of the Steep Land Overlay Code is provided in Table 5.

Table 5: Relevant Assessment Benchmarks for the Steep Land Overlay Code

Performance Outcomes	Acceptable Outcomes	Response
General		
PO1 Development: 1. Ensures people and property are protected from landslide hazard originating from inside or external to the site. 2. Ensures the long term stability of the land, 3. Ensures access is not at risk from being impeded by a landslide event 4. Does not increase the risk of landslide to adjoining properties; and	AO1.1 Development is not located on that part of the land identified on the Steep land overlay.	**Complies with AO1.1** A portion of the western boundary of the Project area is located on land within the Steep Land overlay. The Project has been designed to avoid these Steep Land areas and therefore will not impact or be impacted by landslide that may cause harm.
	AO1.2 Where development is located on land identified on the Steep land overlay, a site-specific geotechnical report is provided that certifies:-	**AO1.2 not applicable** The Project has been designed to entirely avoid land identified on the Steep Land overlay as well as any area of land with a slope greater than 15%.

Performance Outcomes	Acceptable Outcomes	Response
5. Incorporates appropriate building types and structures that minimise disturbance to the land. *Note—To achieve compliance with this performance outcome, a Geotechnical Report can to be prepared and certified by a RPEQ in accordance with the Landslide Risk Management – Australian Geomechanics Journal.*	1. the stability of the site, including associated buildings and infrastructure, will be maintained during both the construction and operational life of the development; 2. the site is not subject to risk of landslide activity originating from other land, including land above the site; and 3. the development will not increase the risk of landslide on the other land. *Note—The Geotechnical Report is to be certified by a RPEQ in accordance with the Landslide Risk Management – Australian Geomechanics Journal.*	
PO2 Paths, driveways and roads: 1. avoid the steepest parts of the land, and 2. are constructed to an appropriate standard to minimise landslide impacts; and 3. follow natural contours and minimise crossing with natural drainage lines	AO2.1 Paths, driveways and roads does not traverse land with a slope exceeding 25% AO2.2 Paths, driveways and roads are sealed with asphalt, concrete or another type of hardstand where traversing a slope greater than 10%	**Complies with AO2.1 & AO2.2** The proposed development is a solar farm with ancillary infrastructure which has been designed around maximising flat and gentle sloping land. Areas of land with a slope greater than 15% have been entirely avoided. Slope within the development footprint ranges from 1-6%, with increased slopes (3-6%) in proximity to foothills of the along the western boundary but are generally 1-3% across the development footprint. As such no paths, driveways and roads will traverse areas of slope greater than 10%.
PO3 Earthworks: 1. minimises disturbance to the natural contours of the site and adjoining properties, and	AO3.1 Earthworks do not: 1. change the ground level more than 1m at any point 2. occur within 1.5m of any property boundary, and	**Complies with PO3** Due to the gently sloping land of the Project area, the Project will not require significant earthworks. There will; however, be some earthworks associated with the

Performance Outcomes	Acceptable Outcomes	Response
2. do not increase the risk of landslide inside or external to the site.	3. result in retaining walls located within 3m of a property boundary, other than where retaining walls are less than 1m in height on a continuous vertical plane. AO3.2 Where involving the construction of the roads, 2m is the maximum cut.	bench to support the ancillary uses (e.g. O&M facility) and substation. An operational works (earthworks) application will be submitted to GRC for assessment once the civil design requirements for the Project are more fully understood. The plans provided for this operational works permit will ensure that the earthworks minimise disturbance to the natural contours of the site and do not increase the risk of landslide.
If involving a dwelling house Not Applicable - The proposed development does not involve the provision of a dwelling house.		
Assessable Development		
Hazardous materials		
PO5 The manufacture or storage of hazardous material in bulk: 1. is not located on land, or in the immediate surrounds of land with a risk of landslide, and 2. does not represent a risk to people and property from landslide hazard.	AO5 The manufacture or storage of hazards materials in bulk is not located on land identified on the steep.	**Complies with AO5.** The proposed development does not involve the production or storage of hazardous materials in bulk.
Minimisation of landslide hazard		
PO6 Development incorporates measures to minimise the landslide risk level by: 1. avoiding works on the steepest parts of the land; and 2. retaining existing vegetation	AO6 No acceptable outcome is nominated.	**Complies with PO6** The proposed development has been positioned in places where it will not impact or be impacted by landslides that may cause harm to the site and the people present. The Project has been designed around maximising flat and gentle sloping land, and entirely avoids land identified on the Steep Land overlay,

Performance Outcomes	Acceptable Outcomes	Response
		including clearing of any vegetation within these areas.
PO7 Paths, driveways and road are designed to: 1. follow natural contours and have the minimum length necessary, and 2. minimise the number of crossings of water courses and drainage lines.	AO7 No acceptable outcome is nominated.	**Complies with PO7** Access tracks will be required for the construction and ongoing maintenance of the Project. Where practicable, existing access tracks and waterway crossings will be used in the first instance and any new access tracks will be located within existing cleared or disturbed land, where practicable. Detailed plan design will demonstrate that pathways and roads follow natural contours and avoid steep land or slopes.
Community infrastructure and emergency services		
PO8 Community infrastructure and emergency services are able to function effectively during and immediately after landslide events.	AO8 No acceptable outcome is nominated.	**Complies with PO8** There are no landslide danger areas within the proposed internal road network or the development area. A perimeter fire break of between 10 m and 15 m will be maintained around the Project area boundary and will provide access for emergency services to the land identified on the Steep Land overlay.

1.6 Development Design Code

An assessment of the proposed solar farm against the relevant assessment benchmarks of the Development Design Code is provided in Table 6.

Table 6: Relevant Assessment Benchmarks for the Development Design Code

Performance Outcomes	Acceptable Outcomes	Response
Utility infrastructure and services		

Performance Outcomes	Acceptable Outcomes	Response
PO1 Development is serviced by an adequate, safe and reliable supply of potable and general use water, connected to reticulated water supply where possible. *Note-Council's documented Maximum Service Level (MSL) is to be considered*	AO1.1 Development is connected to Council's reticulated water supply network, including the installation of easily Ao25.2 accessed water meters, in accordance with the *Engineering design planning scheme policy*. OR AO1.2 If connection to Council's reticulated water supply is not possible, a potable on-site water supply is provided in accordance with the *Engineering design planning scheme policy*.	**Complies with AO1.2** The proposed development is not within Council's reticulated water supply network and instead will be serviced by onsite water tanks of a minimum total capacity of 40,000 L. This will ensure sufficient water is available for fire-fighting purposes. The proposed development will not be required to be connected to Council's reticulated water supply, as the site will have an on-site potable water supply, that meets the requirements of the *Engineering design planning scheme policy*.
PO2 Development is serviced by appropriate sewerage disposal infrastructure which ensures: 1. no adverse ecological impacts on the receiving environment 2. cumulative impacts of onsite waste water treatment is considered in assessing the likely environmental impacts; 3. public health is maintained; 4. the location, site area, soil type and topography is suitable for any on site waste water treatment; and 5. the reuse of waste water does not contaminate any surface water or ground water.	AO2.1 Development is connected to Council's reticulated sewerage treatment system, in accordance with the *Engineering design planning scheme policy.* AO2.2 If connection to Council's reticulated sewerage treatment system is not possible, development wastewater is treated in accordance with Council's Engineering design planning scheme policy and relevant Australian Standards (including AS1547) and State requirements as amended.	**Complies with AO2.2** The proposed development is not within Council's reticulated sewerage infrastructure nor is connection to reticulated sewerage required given the nature of the uses proposed. Portable toilet hire will be utilised during construction with waste taken to a licensed facility to be disposed of safely. A Home Sewerage Treatment Plant (HSTP) servicing a workforce of up to 10 people will be used during the operation of the Project.
PO3 Where not located in the Rural zone, electricity supply network and telecommunication service connections are provided to the site and are connected.	AO3.1 The development is connected to electricity and telecommunications infrastructure in accordance with the standards of the relevant regulatory authority prior to the commencement of any use of the site.	**Not applicable.** The proposed development is located in the Rural Zone.

Performance Outcomes	Acceptable Outcomes	Response
	AO3.2 Where not included in the development, provision is made for future telecommunications services (such as fibre optic cable) in accordance with the standards of the relevant regulatory authority.	
PO4 Development in areas serviced by a reticulated water supply where: 1. areas of the development are accessed by common private title or 2. the council infrastructure is not sufficient to provide fire fighting service in terms of pressure, flow or proximity, 3. is serviced with appropriate privately owned internal fire hydrant infrastructure and provides unimpeded emergency access.	AO4.1 Development, including buildings, both attached and detached, and not covered in other legislation or planning provisions mandating fire hydrants, conform with SPP Code: Fire services in developments accessed by common private title.	**Not applicable.** The area in which the proposed development is located is not serviced by a reticulated water supply.
	AO4.2 Fire fighting infrastructure located within private property (excluding reticulated mains and hydrants on reticulated mains) is owned maintained by a party other than Council	
PO5 Stormwater management is designed and operated to: 1. ensure that adjoining land and upstream and downstream areas are not adversely affected through any ponding or changes in flows, and 2. direct stormwater to a lawful point of discharge through competently designed and constructed outlet works in a manner that reflects the predevelopment status.	AO5.1 Development does not result in an increase in flood level flow velocity or flood duration on upstream, downstream or adjacent properties.	**Complies with PO5 and PO6** The Stormwater Management Plan and Flood Impact Assessment in **Appendix D** demonstrate that the Project will be designed to meet the requirements of PO5.
	AO5.2 Stormwater (including roof and surface water) is conveyed to the kerb and channel or other lawful point of discharge in accordance with the requirements of the *Engineering design planning scheme policy*.	
PO6 Stormwater drainage network elements are designed and constructed with the capacity to control	AO6	

Performance Outcomes	Acceptable Outcomes	Response
stormwater flows under normal and minor system blockage conditions for the applicable defined flood event ensuring there is no damage to property or hazards for motorists.	Stormwater infrastructure is designed and constructed in accordance with the requirements of the *Engineering design planning scheme policy*.	
Wastewater		
PO7 Wastewater is managed to: 1. avoid wastewater discharge to any waterway, and 2. if wastewater discharge to waterways cannot be practically avoided, discharge is minimised by re–use, recycling, recovery and treatment for disposal to sewer, surface water and groundwater. *Note—Wastewater is defined in accordance with Environmental Protection (Water) Policy 2009, schedule 2).* *Note—A wastewater management plan (WWMP) is prepared by a suitably qualified person and addresses:* • *wastewater type, and* • *climatic conditions, and* • *water quality objectives (WQOs), and* • *best–practice environmental management.*	AO7 Development does not discharge wastewater into any waterways.	**Complies with AO7** The development will not discharge wastewater into any waterways.
Earthworks and retaining walls		
PO8 Development is designed such that earthworks and any associated retaining structures: 1. result in a landform that is stable,	AO8.1 Earthworks and any retaining structures (including anchors, sheet piling, seepage drains, construction requirements and retained soil etc.) and their zone of influence must:	**Complies with PO8** Due to the gently sloping land of the Project area, the Project will not require significant earthworks. There will; however, be some earthworks associated with the

Performance Outcomes	Acceptable Outcomes	Response
2. maintain as far as practical, and minimise alteration to, the existing landforms, 3. minimise height of batter faces and retaining structures, 4. do not unduly impact on the amenity or privacy for occupants of the site or on adjoining land, 5. do not unduly impact on the amenity of the streetscape, 6. achieves a high level of visual amenity, 7. does not prevent or obstruct the function of adjacent sites including land in Council ownership; and 8. are designed and constructed so that they do not cause unintentional ponding (i.e. ponding not associated with stormwater control) on the site or on nearby land.	1. be wholly contained within the development site; 2. ensure the top and toe of any batter slope (excluding those associated with road works) is a minimum of 0.9m horizontally from the boundary of the development site; 3. not be located on land in Council ownership (e.g. road reserves, parks and drainage reserves) 4. not include any services within the retained soil (as determined by the internal friction angle of the soil being retained) or the zone of influence of the retaining structures' foundation; and 5. allow for the installation and maintenance of services within any retaining structures 6. excavating or filling is no greater than 1m.	bench to support the ancillary uses (e.g. O&M facility) and substation. An operational works (earthworks) application will be submitted to GRC for assessment once the civil design requirements for the Project are more fully understood. The plans provided for this operational works permit will ensure that the earthworks minimise disturbance to the natural contours of the site and do not increase the risk of landslide.
	AO8.2 Development is designed such that the steepest formed batter slope is 1 vertical to 4 horizontal.	
	AO8.3 Earthworks and any associated retaining structures are designed and constructed in accordance with the *Engineering Design Planning Scheme Policy*.	
	AO8.4 For Reconfiguring A Lot applications: 1. constructed embankment slopes are located along the rear and side boundaries of adjoining allotments and are designed and constructed: a. within the development site, b. on land which is not to enter Council ownership,	

Performance Outcomes	Acceptable Outcomes	Response
	c. within the allotment located on the low side of the common boundary, and d. iv. with a top and toe at least 0.9m horizontally from the boundary 2. retaining walls are located along the rear and side boundaries of adjoining allotments and are designed and constructed either: a. on the low side of the common boundary with a top at least 0.9m horizontally from the boundary; or b. on the high side of the common boundary with a toe at least 5m horizontally from the boundary	
Parking and access		
PO9 Development includes the provision of adequate and convenient car and bicycle parking on–site to satisfy the anticipated requirements of the activity.	AO9 Car parking and bicycle parking is provided on site in accordance with the rates specified in the Parking rates planning scheme policy.	**Complies with AO9** The *Parking rates planning scheme policy* does not specify car parking rates for a Renewable Energy Facility or a Substation use. Instead, car parking rates for Major Electricity Infrastructure and Utility Installation have been used as a reference to ensure sufficient car parking areas are provided for the proposed development. In accordance with the Traffic Impact Assessment (TIA) (**Appendix E**), a minimum of 50 non-formalised car parking will be made available.
PO10 Where in urban areas, development provides end of trip facilities to encourage people to engage in active transport (bicycles and pedestrians): 1. to meet the needs of users and promote active modes of travel	AO10 Development provides cycling and pedestrian end of trip facilities, in accordance with the requirements of the Queensland Development Code.	**Not applicable** The proposed development is not located within an urban area, nor are there existing active or public transport networks in the vicinity of the site.

Performance Outcomes	Acceptable Outcomes	Response
2. at convenient, easily identifiable, safe locations, and 3. in locations that do not obstruct vehicular, bicycle or pedestrian movement paths.		
PO11 Access driveways are designed and constructed to: 1. provide convenient access to the site and maintain the safety and efficiency of the road, 2. minimise conflicts with traffic and pedestrians, and 3. are constructed to a standard that is appropriate to the location and to meet the anticipated volume and type of traffic.	AO11.1 Access driveways are: 1. designed and constructed in accordance with the *Engineering design planning scheme policy*, and 2. in accordance with AS2890 as amended, and 3. certified by a Registered Professional Engineer of Queensland. AO11.2 Access driveways allow vehicles (with the exception of dwelling house and dual occupancy) to enter and exit the site in a forward gear.	**Complies with AO11.1 & AO11.2** Access driveways will be designed to meet the requirements of AO11.1. The proposed development's design will enable vehicles to enter and exit the site in a forward gear.
PO12 4. Vehicle movement areas (including internal driveways, access aisles, manoeuvring areas, parking areas (car and bicycle) and service bays) are designed to ensure: a. a gradient appropriate for the type of vehicles b. a surface suitable for the proposed use c. effective stormwater drainage d. clearly marked and signed spaces e. convenience and safety for drivers and pedestrians, and	AO12 Manoeuvring, loading and unloading areas, and parking areas (car and bicycle) are: 1. designed and constructed in accordance with the *Engineering design planning scheme policy* 2. Imperviously sealed using concrete or asphalt bitumen 3. In accordance with AS2890 as amended, and 4. certified by a Registered Professional Engineer of Queensland.	**Complies with AO12** Access driveways will be designed to meet the requirements of AO12

Performance Outcomes	Acceptable Outcomes	Response
f. adequate dimensions to meet user requirements, including access and egress for emergency vehicles		
PO13 Footpaths provide pedestrian and bicycle access to the site, which is designed to: 1. provide safe movement; 2. avoid unnecessary conflict between pedestrians, bicycles and motor vehicles; 3. include durable and stable materials; and 4. match any adjacent footpath.	AO13 Footpaths are: 1. provided to the full road frontage and designed in accordance with the *Engineering Design Planning Scheme Policy* 2. connected to the existing footpath network, and 3. certified by a Registered Professional Engineer of Queensland.	**Not applicable** The proposed development is in a rural area. There are no existing active or public transport networks in the vicinity of the site.
PO14 Pedestrian access to buildings: 1. does not obstruct pedestrian movement (or form physical clutter) on public footpaths 2. are not visually overbearing (or form visual clutter) in the streetscape, and 3. provide safe, efficient, equitable and convenient access including wheelchair access.	AO14 Pedestrian access steps, escalators, ramps and lifts are: 1. located wholly within the site 2. setback a minimum of 1.5m from the front boundary, and 3. compliant with the *Disability Discrimination Act 1992*.	**Not applicable** Not relevant given the nature of the proposed uses.
Acoustic and air quality		
PO15 Development minimises potential conflicts with, or impacts on, other uses having regard to odour, dust or other emissions.	AO15 Development achieves the air quality design objectives set out in the *Environmental Protection (Air) Policy 2008*, as amended.	**Complies with AO15** No indicators as provided in Schedule 1 – Air Quality Objectives of the *Environmental Protection (Air) Policy 2019* (EPP (Air)), will be generated during the construction, operation or decommissioning stages of the Project. Dust generated during construction will be managed in accordance with the measures outlined in the Preliminary Erosion and Sediment Control Plan (P-

Performance Outcomes	Acceptable Outcomes	Response
		ESCP) provided at **Appendix I**. Site-specific measures will be determined by ESCPs and / or CEMPs to be developed prior to the commencement of construction.
PO16 Development prevents or minimises the generation of any noise or vibration so that: 1. nuisance is not caused to adjoining premises or other nearby sensitive land uses, and 2. desired ambient noise levels in residential areas are not exceeded.	AO16 Development achieves the noise generation levels set out in the *Environmental Protection (Noise) Policy 2008,* as amended. *Note—To achieve compliance, development is planned, designed and managed to ensure emissions from activities to achieve the appropriate acoustic objectives (measured at the receptor dB(A)).*	**Complies with AO16** The operation of the substation (transformers) is the highest noise generating activity for the Project which will occur mostly during daytime hours (7:00am to 6:00pm). The Noise Assessment (**Appendix M**) for the Project concludes no exceedances of daytime, evening or nighttime noise criteria set out by the EPP (Noise) are expected at any of the noise sensitive receiver locations. No other operational activities are anticipated to generate noise levels that would be audible or exceed the noise limits set out in EPP (Noise). Most construction work, including piling, trenching and deliveries, will be undertaken during standard construction hours: Monday to Saturday 6:30am to 6:30pm. Where necessary, low noise generating construction activities may be undertaken outside of standard construction hours.
PO17 Sensitive development adjacent to State controlled roads or Council controlled arterial and sub–arterial roads minimise through their own design the nuisance caused by noise, vibration and dust emissions.	AO17 Sensitive development (other than Class 1, 2, 3 or 4 buildings) complies with the requirements of the *Department Main Roads – Road Traffic Noise Management Code of Practice* and the *Environmental Protection (Noise) Policy 2008*.	**Not applicable** The proposed development is not considered a sensitive development.
Lighting		
PO18	AO18	**Not applicable**

Performance Outcomes	Acceptable Outcomes	Response
External lighting is provided in urban areas to ensure a safe environment.	Technical parameters, design, installation, operation and maintenance of outdoor lighting comply with the requirements of *AS4282 – Control of the Obtrusive Effects of Outdoor Lighting* as amended.	The proposed development is not within an urban area. All outdoor lighting will comply with *AS4282* and *AS 1158.1.1* and will provide appropriate visual conditions which are conducive to the safe and comfortable movement of vehicle traffic at night and contribute to the discouragement of illegal acts.
PO19 Outdoor lighting does not cause undue disturbance to any person, activity or fauna because of emission, either directly or by reflection.	AO19 The vertical illumination resulting from direct, reflected or other incidental light coming from a site does not exceed 8 lux when measured at any point 1.5m outside of the boundary of the property at any level from ground level up.	**Complies with AO19** The proposed development will comply. If deemed necessary, this requirement could be conditioned within the development permit.
PO20 Street lighting and signs are provided to ensure the safety of both vehicles and pedestrians, and to facilitate access and movement.	AO20 Street lighting and signage comply with the requirements of the *Engineering design planning scheme policy*.	**Not applicable** The proposed development does not front a Council street with lighting.
Waste Management		
PO21 Development: 1. minimises waste generation (including construction, demolition and operational waste) 2. provides adequate facilities on–site for the storage of waste and recyclables.	AO21 Waste storage and management arrangements are sited, screened and designed in accordance with the *Waste Management Planning Scheme Policy*.	**Complies with AO21** The proposed development will comply. If deemed necessary, this requirement could be conditioned within the development permit.
PO22 Development is designed to allow for safe and efficient servicing of waste and recycling containers through:	AO22.1 Where on–site waste and recycling collection services are proposed: 1. collection vehicle entry and exit from the site is carried out in a forward motion, and	**Complies with AO22.1 & AO22.2** The proposed development will comply. If deemed necessary, this requirement could be conditioned within the development permit.

Performance Outcomes	Acceptable Outcomes	Response
1. development layout that is designed to facilitate direct and unobstructed servicing of waste and recycling containers, and 2. minimising the potential for nuisances to be caused by way of noise and odour.	2. the proposed point of servicing is designed in accordance with the *Waste Management Planning Scheme Policy*. AO22.2 Where on–street (kerbside) collection is proposed for any standard waste and recycling containers or bulk bin waste and recycling, waste management is designed in accordance with the *Waste Management Planning Scheme Policy*.	
For all assessable development		
Stormwater management		
PO23 1. Stormwater management systems: implement water sensitive urban design (WSUD) principles that: a. protect natural systems and waterways b. allow for the detention of stormwater instead of rapid conveyance c. minimise impervious areas d. utilise stormwater to conserve potable water e. integrate stormwater treatment into the landscape f. ensure water quality values are protected 2. where privately owned must be maintained (including costs) for the life of the system 3. provide for safe access and maintenance 4. maintain natural drainage lines and adequate filtering and settlement of sediment for the protection of watercourses, coastal wetlands and	AO23 Stormwater management systems are designed and constructed in accordance with the *Engineering Design Planning Scheme Policy*. *Note—A site stormwater quality management plan (SQMP) is prepared in accordance with Engineering Design Planning Scheme Policy and the State Planning Policy requirement for stormwater quality treatment measures.*	**Complies with PO23** The SMP in **Appendix D** provides recommended design and construction of stormwater management systems for the Project in accordance with WSUD principles and prevailing engineering standards.

Performance Outcomes	Acceptable Outcomes	Response
beaches from point source and non–point source stormwater discharges, and 5. are designed to minimise ongoing maintenance costs		
PO24 Development allows for sufficient site area to accommodate an effective stormwater management system.	AO24 No acceptable outcome specified.	**Complies with PO24** The SMP in **Appendix D** demonstrates that there is sufficient site area to accommodate an effective stormwater management system.
PO25 Development provides for the orderly development of stormwater infrastructure within a catchment, having regard to: 1. existing capacity of stormwater infrastructure and ultimate catchment conditions 2. discharge for existing and future upstream development.	AO25 No acceptable outcome specified.	**Complies with PO25 and PO26** The SMP in **Appendix D** demonstrates that the Project will provide for the orderly development of stormwater infrastructure. Water quality for the construction phase will be addressed through the measures identified in the Preliminary Erosion and Sediment Control Plan in **Appendix I**.
PO26 Construction activities for the development avoid or minimise adverse impacts on stormwater quality.	AO26 The release of sediment–laden stormwater is avoided for the nominated design storm, and minimised when the nominated design storm is exceeded, by addressing design objectives listed below in Table 9.3.1.3.2—Construction phase, or local equivalent for: 1. drainage control 2. erosion control 3. sediment control, and 4. water quality outcomes. *Note—An Erosion and Sediment Control Plan (ESCP) is*	

Performance Outcomes	Acceptable Outcomes	Response
	prepared by a suitably qualified person that demonstrates: • *erosion and sediment control practices (including any proprietary erosion and sediment control products) are designed, installed, constructed, operated, monitored and maintained, and any other erosion and sediment control practices are carried out in accordance with local conditions, or* • *how stormwater quality will be managed in accordance with an acceptable regional or local guideline so that target contaminants are treated to a design objective at least equivalent to this Acceptable outcome.*	
PO27 Reconfiguration of lots includes stormwater management measures in the design of any road reserve, streetscape or drainage networks to: 1. minimise impacts on the water cycle 2. protect waterway health by improving stormwater quality and reducing site run–off, and 3. avoid large impervious surfaces.	AO27 No acceptable outcome specified.	**Not applicable** The proposed development does not involve the reconfiguration of a lot.
Wastewater management		
PO28 Wastewater discharge maintains ecological processes, riparian vegetation, waterway integrity, and downstream ecosystem health including: 1. protecting applicable water quality objectives for the receiving waters	AO28 No acceptable outcome specified.	**Complies with PO28** The proposed development will neither produce nor discharge wastewater into any waterway. As such nearby ecological processes and ecosystem health will not be compromised.

Performance Outcomes	Acceptable Outcomes	Response
2. managing soil disturbance or altering natural hydrology in coastal areas 3. avoiding or minimising the release of nutrients of concern so as to minimise the occurrence, frequency and intensity of coastal algal blooms, and 4. avoiding lowering groundwater levels where potential or actual acid sulfate soils are present in coastal areas. *Note—Compliance with part of this performance outcome may be demonstrated by following the management advice in the guideline: Implementing Policies and Plans for Managing Nutrients of Concern for Coastal Algal Blooms in Queensland by the Department of Environment and Heritage Protection.*		
PO29 Where involving trade waste or contaminated wastewaters, they are managed so that: 1. the pH of any wastewater discharged is maintained between 6.5 and 8.5 to avoid mobilisation of acid, iron, aluminium, and metals 2. holding times of neutralised wastewaters ensures the flocculation and removal of any dissolved iron prior to release 3. visible iron floc is not present in any discharge 4. precipitated iron floc is contained and disposed of, and	AO29 No acceptable outcome specified.	**Not applicable** The proposed development will not involve trade waste or contaminated wastewaters.

Performance Outcomes	Acceptable Outcomes	Response
5. wastewater and precipitates that cannot be contained and treated for discharge on site are removed and disposed of through trade waste.		
Bridge and culvert work		
PO30 Bridges and culverts for flood immunity: 1. are designed and located to minimise traffic disruption 2. improve public safety 3. provides for fauna habitat movement where possible, and 4. makes appropriate allowance for active transport.	AO30 Bridges and culvert works are provided in accordance with the *Engineering Design Planning Scheme Policy*.	**Complies with PO30** The proposed development will not require the provision of bridges and culverts for flood immunity. Any mitigation measures that may be deemed necessary to respond to the potential pooling of water at the southern boundary of the substation location (refer to the Flood Impact Assessment at **Appendix D** of the Planning Report) can be appropriately conditioned to be designed and constructed in accordance with the Engineering Design Planning Scheme Policy.
Road design		
PO31 Roads providing access to the site are provided, constructed and maintained to a standard which is adequate for the traffic type and volume likely to be generated by the activities on site.	AO31 External road works are provided in accordance with the requirements of the *Engineering Design Planning Scheme Policy*.	**Complies with PO31** Due to the negligible volumes of traffic that will be generated only during the construction phase of the Project of the development, road upgrades are not been considered necessary (refer to the TIA - **Appendix E**). The existing road network is adequate to accommodate the anticipated daily vehicles trips of 100 workforce vehicles and 20 heavy vehicles.
Land use and transport integration		
PO32 Development:	AO32 No acceptable outcome specified.	**Complies with PO32** The proposed development does not compromise the existing road hierarchy.

Performance Outcomes	Acceptable Outcomes	Response
1. supports a road hierarchy which facilitates efficient movement of all transport modes including public transport, and 2. appropriately integrates and connects with surrounding movement networks. *Note—Where roads are required for buses refer to the design and construction requirements in the IDAS code in the Transport Planning and Coordination Regulation 2005, schedule, part 2.*		
PO33 Development enhances connectivity between existing and future public passenger transport facilities and other transport modes through: 1. providing direct linkages for passengers between existing and future public passenger transport facilities and other transport modes, and 2. way–finding information for existing public transport facilities and interconnecting transport modes.	AO33 No acceptable outcome specified.	**Not applicable** There are no existing active or public transport networks in the vicinity of the site.
PO34 Development provides direct, safe and equitable access to and use of public passenger transport facilities.	AO34 Public passenger transport facilities and any through–site pathway connections, including road crossings, to public passenger transport facilities are provided in accordance with the *Engineering Design Planning Scheme Policy* and the *Disability Discrimination Act 1992*.	**Not applicable** There are no existing active or public transport networks in the vicinity of the site.
PO35	AO35 No acceptable outcome specified.	**Complies with PO35** The proposed development will not compromise existing public utility infrastructure.

Performance Outcomes	Acceptable Outcomes	Response
Development is located and designed to maintain the operational and structural efficiency of public utility infrastructure.		
Acoustic and air quality		
PO36 Where located in close proximity to an operational railway corridor, sensitive land uses mitigate amenity impacts and maintain the operational integrity of the rail corridors.	AO36 No acceptable outcome specified.	**Not applicable** The proposed development is not in proximity to an operational railway corridor. The closest railway line is the North Coast Line located approximately 5 km east of the Project site.
PO37 Utility services and service structures attached to buildings, do not adversely impact on the acoustic or visual amenity of the surrounding area and are: 1. located as far from sensitive land uses, road frontage boundaries and public open spaces as practical, and 2. acoustically shielded and visually screened so as not to be audible or visible from adjoining and nearby sites, public open spaces and roads.	AO37 No acceptable outcome specified.	**Complies with PO37** The proposed development is satisfactorily distanced from any sensitive uses. The LVIA (**Appendix F**) demonstrates that the Project will not have an adverse impact on the visual amenity and landscape character of the locality. The Noise Assessment (**Appendix M**) demonstrates that the Project will not have a significant impact on the acoustic environment.
Weed control		
PO38 Weed control practices and plant and equipment cleaning and inspection protocols are: 1. implemented to avoid the introduction and spread of weeds along transport routes and delivery points 2. undertaken to control existing declared weeds and pest animals prior to the commencement of and during works.	AO38 No acceptable outcome specified.	**Complies with PO38** The Project site is host to several prevalent, widespread invasive weed species (refer to EAR – **Appendix G**). A comprehensive Weed and Pest Management Plan (WPMP) will be developed and implemented as part of the Environmental Management Framework for the construction and ongoing operation of the Project. The WPMP will

Performance Outcomes	Acceptable Outcomes	Response
Note—Refer also to the Queensland Guideline for Limiting Weed Seed Spread (DNR 2000).		include measures to reduce the spread of new invasive weed species and to manage the existing populations.
If a non-tidal artificial waterway Not Applicable – The proposed development is not located within or near a non-tidal artificial waterway		
If Port services where a marina (ship sourced pollutants reception facilities) Not Applicable – The proposed development is not located within or near a port		
Structures over multiple lots		
PO45 Where buildings and structures are located on multiple lots, these are amalgamated to form one lot.	AO45 No acceptable outcome specified.	**Partial compliance with PO45** The proposed solar farm area is located across multiple lots, whereas the substation and ancillary infrastructure (laydown areas, control building, workshop, etc.) are all located within one lot (Lot 132 FD32). It is not deemed appropriate to formally amalgamate the 14 lots into 1 for the solar farm development, as at the end of the Project life (around 40 years) the Project will be decommissioned, and the land returned to its previous state for potential sale and recommencement of agricultural uses.

1.7 Landscaping Design Code

An assessment of the proposed solar farm against the relevant assessment benchmarks of the Landscaping Design Code is provided in Table 7.

Table 7: Relevant Assessment Benchmarks for the Landscaping Design Code

Performance Outcomes	Acceptable Outcomes	Response
General landscape design and works		
PO1 Landscape design of both public and private spaces:	AO1 No acceptable outcome is nominated.	**Complies with PO1 and PO2**

Performance Outcomes	Acceptable Outcomes	Response
1. complements the intended character of the streetscape and zone, and 2. is functional and designed to be visually appealing in the long–term.		The LVIA (**Appendix F**) demonstrates that the Project will not have an adverse impact on the visual amenity and landscape character of the locality. The Landscape Plan provided in **Appendix F** demonstrates how any landscaping works for the Project will be locally appropriate.
PO2 Landscape works and plant selection ensure: 1. climatically appropriate species are planted 2. the provision of shade in appropriate locations 3. an appropriate mix of soft and hard elements, and 4. planting densities and stock sizes are suitable for their location, purpose and hardiness.	AO2.1 Selected tree species within communal recreation areas are to provide at least 30% shade coverage within 5–10 years of planting.	
	AO2.2 A minimum of 50% of landscaped areas are to be covered in soft landscaping (turf areas and planting beds), with at least 25% of that area being planting.	
PO3 Street trees are provided in appropriate locations to: 1. provide shade for pedestrians along footpaths 2. reinforce the legibility of the movement network 3. avoid damage to public or private property or infrastructure 4. enhance the character of the streetscape, and 5. ensure visibility is maintained from entrances and exits to properties and at intersections.	AO3.1 Street trees are provided at the rate whichever is the lesser of: 1. one street tree per lot frontage or one tree per 10 linear metres of road frontage or 2. a minimum of 1 tree per 400m^2 of site area.	**Not applicable** The proposed development does not front an urban street.
	AO3.2 Species of street trees are selected in accordance with the plant species list in Table 9.3.4.3.2	
PO4 Street treatments including pavement, seating, lighting, rubbish bins are provided to: 1. enhance the usability and amenity of streets and public spaces 2. facilitate social interaction, and 3. maintain clean streetscapes.	AO4 No acceptable outcome is nominated.	**Not applicable** The proposed development does not front an urban street.

Performance Outcomes	Acceptable Outcomes	Response
PO5 Wherever possible, landscape design facilitates the retention and integration of mature existing vegetation, both within and external to the site.	AO5.1 Existing mature trees and vegetation are retained and incorporated into the landscape design. AO5.2 Removed or damaged mature vegetation is replaced with mature vegetation of a comparable quantity and species.	**Complies with PO5** The LVIA (**Appendix F**) demonstrates that the Project will not have an adverse impact on the visual amenity and landscape character of the locality. The Project design has sought to avoid the clearing of all remnant endemic vegetation within the Project area, with the retention and enhancement of the riparian corridors through the site.
Landscaping along boundaries and edges		
PO6 Planting and landscape elements along boundaries and edges assist in: 1. maintaining privacy between adjoining buildings 2. protecting local views, vistas and sightlines 3. enhancing the visual appearance of the built form 4. screening service, utility and parking areas 5. minimising noise impacts between noise sources and sensitive receiving environments, and 6. reducing the visual impact of acoustic fences, retaining walls and long unbroken walls.	AO6 No acceptable outcome is nominated.	**Complies with PO6** The LVIA (**Appendix F**) demonstrates that the Project will not have an adverse impact on the visual amenity and landscape character of the locality. The Landscape Plan provided in **Appendix F** demonstrates how any landscaping works for the Project will be locally appropriate.
Open air carparking		
PO7 Open air car parking areas are provided with suitable levels of shade through the use of appropriate planting.	AO7.1 Shade trees are located at the rate of 1 tree per 6 car spaces. AO7.2 Wheel stops are provided to protect vegetation.	**Complies with PO7** The Project can be designed to comply with these requirements. If deemed necessary, this requirement could be conditioned within the development permit.

Performance Outcomes	Acceptable Outcomes	Response
	AO7.3 Tree selection is in accordance with plant species list.	
Sustainability		
PO8 Landscape design including irrigation methods optimise water and energy efficiency and responds appropriately to local conditions, by: 1. maximising the exposure to the prevailing summer breezes and the north–east winter morning sun 2. minimising exposure to the prevailing winter winds and western summer sun 3. optimising shade to create useable and comfortable areas, and 4. maintaining infiltration to subsurface soil.	No acceptable outcome is nominated	**Complies with PO8** The Project can be designed to comply with these requirements for landscaped elements. If deemed necessary, this requirement could be conditioned within the development permit.
Safety		
PO9 Landscape elements enhance the safety, legibility of places and do not undermine the surveillance of paths, walkways, parking areas, streets and public spaces by ensuring: 1. landscape elements (including signage and other infrastructure) does not interfere with sightlines 2. spaces are well lit, free from obstructions and clearly defined by landscape treatments, and 3. public and private areas are clearly distinguishable and accessible.	AO9.1 Plant selection adjacent to pedestrian movement areas provides a clear trunk of at least 2m at maturity. AO9.2 Understorey planting maintains a height of less than 600mm at maturity.	**Complies with PO9** The Project can be designed to comply with these requirements for landscaped elements. If deemed necessary, this requirement could be conditioned within the development permit.

Performance Outcomes	Acceptable Outcomes	Response
Note—Applicants should have regard to Crime Prevention through Environmental Design Guidelines for Queensland.		
Maintenance		
PO10 Landscape elements do not adversely affect stormwater quantity or quality by ensuring: 1. the flow of water along overland flow paths is not restricted 2. opportunities for water infiltration are maximised, and 3. areas of pavement, turf and mulched garden beds are appropriately located and adequately drained.	AO10 No acceptable outcome is nominated	**Complies with PO10-PO13** The Project can be designed to comply with these requirements for landscaped elements. If deemed necessary, this requirement could be conditioned within the development permit.
PO11 Landscape elements: 1. provide high levels of durability and robustness 2. are cost effective, and 3. have the ability to be maintained conveniently over the long–term.	AO11 No acceptable outcome is nominated	
PO12 Drainage of podium planters allows for flush out in future and is adequately drained.	AO12 No acceptable outcome is nominated	
PO13 Landscape works and plant selection protects the structural integrity and function of: 1. buildings and structures; 2. overhead and underground services, and	AO13 No acceptable outcome is nominated	

Performance Outcomes	Acceptable Outcomes	Response
3. other forms of infrastructure.		